Traces

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CONCEPT

Traces aims to play with illusions of self through unique participatory media. Through the use of video and sound, one's grasp on depth, light directionality, and time is altered. As we traverse space we leave pieces of our occupation—reminders of our presence there. Footsteps, foot prints, smoke and shadows are all temporal reminders of human presence. Simultaneously these imprints are spatial signifiers. Footsteps can inform occupants of materiality, depth and distance. Shadows indicate time, season and depth. This project aims to acknowledge and capture those Traces.

Traces

Using a Kinect sensor, a person's silhouette is recorded as he passes through a hallway. This silhouette is then projected with a delay. The delay is intended to create a disconnect between the person's actual shadow and projected shadow, a moment of pause or disorientation. As the next person then passes through the installation they create a ripple in this delay. Each subsequent occupant then extends the delay so that when 6 people pass through the installation there is an entire disconnect between the first occupant and their projected shadow.

Traces

Similarly, footsteps are recorded and played back at varying speeds. Therefore, there is an echo in the shadow and footsteps of previous occupants and a disconnect of time due to the varying delay and speeds.

It was with design intent that the installation occurred in the hallway. The goal was to capture as many passersby as possible. Additionally, the hallway provided for a naturally echoed experience. The goal was that the projected footsteps were significantly distorted by the space in which they were experienced.

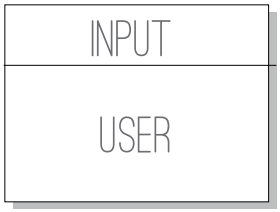
Traces

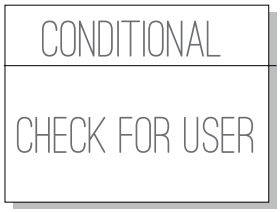
Installation Concept

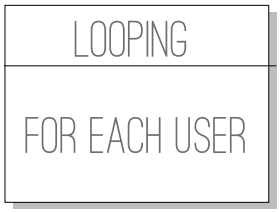
INFORMATION FLOW

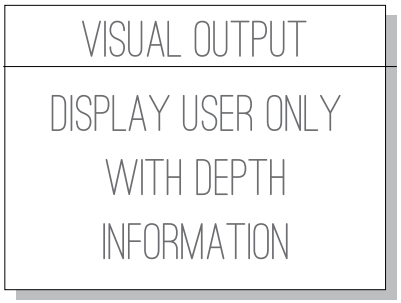
The feedback loop that organized this installation utilizes an occupants silhouette as input, processes the input with a time delay and triggers projection and audio play back based upon that input. Additionally, each occupant adds a time delay to the overall projection such that each occupant causes a ripple in time.

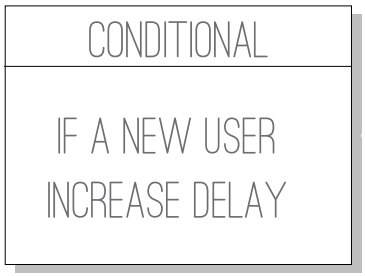
One of the best aspects of utilizing a Kinect for this installation is ability to sense skeletons. The installation and projection was capable of utilizing humans as input because of this skeletal tracking. Despite other attempts to record shadows or silhouettes the skeletal tracking of the Kinect proved to be most successful. Another added benefit of this sensor was the ability to capture user depth along with outline. This meant that there could be additional information read into the projection.

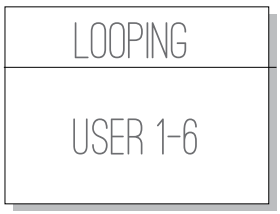












Feedback Loop

THE INSTALLATION

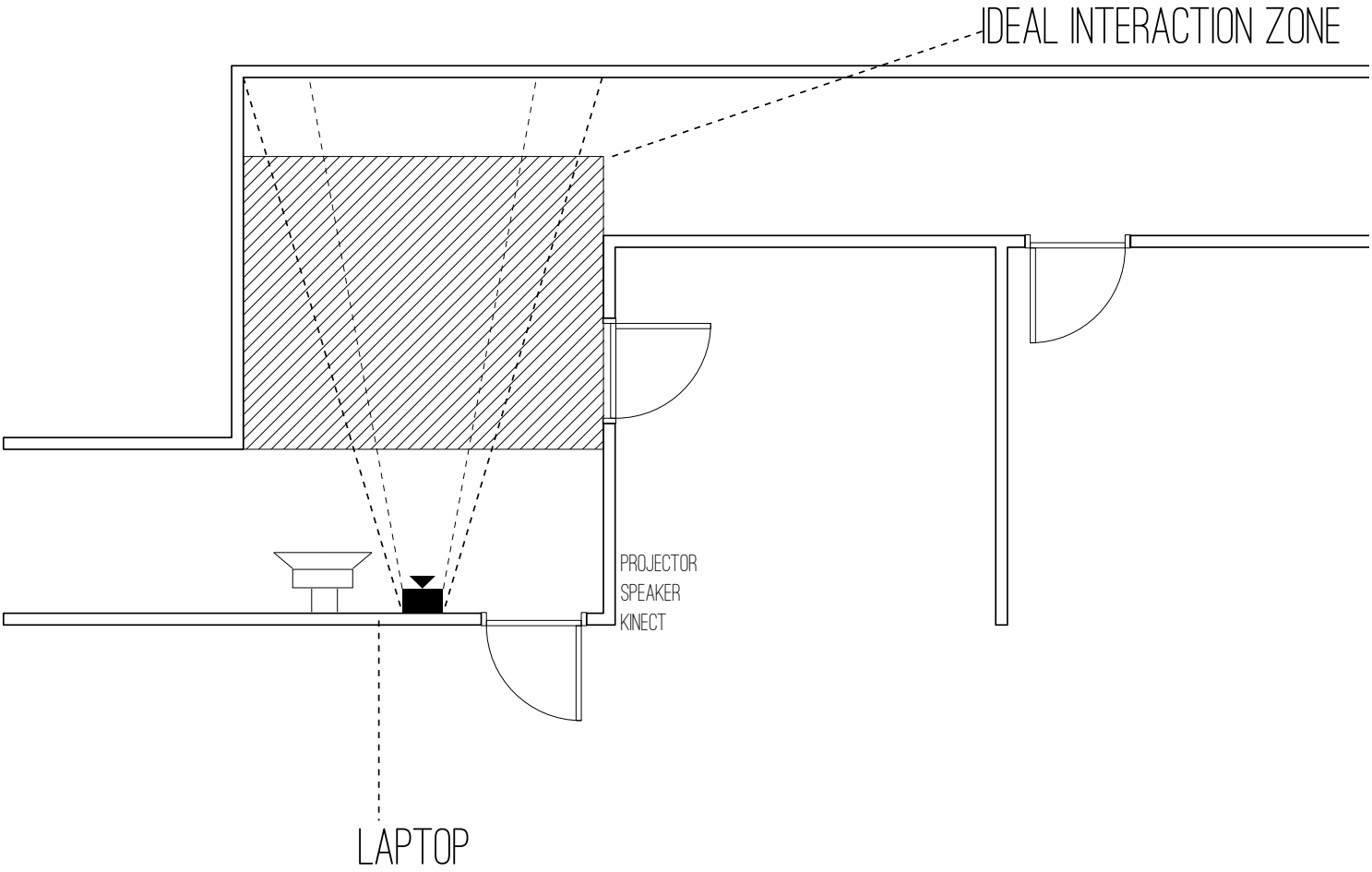
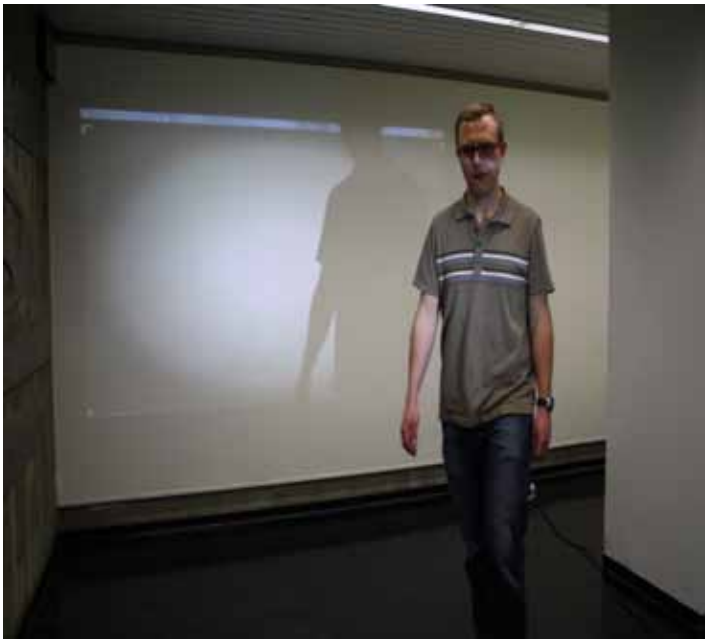


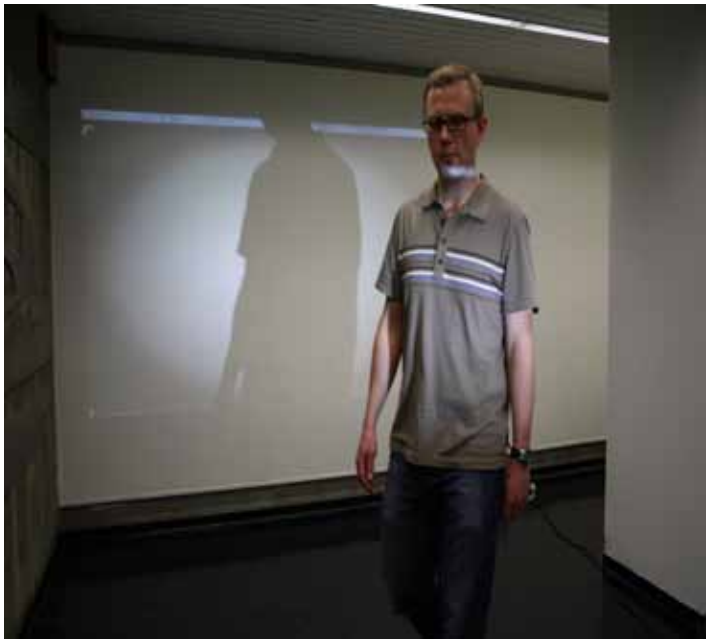
Image Caption

INTERACTION SCENARIO

Within the hallway the projector is located along the back wall of the space. The location for the projector here is intentional. From this location the occupants actual shadows are forced onto the wall next to their projected ones. The intent was that having real and projected side by side would create a larger disconnect in the experience of the installation. Additionally, if the installation was to be repeated speakers would have been installed along the length of the hallway so that the installation was felt through out the space.



Scenario 1



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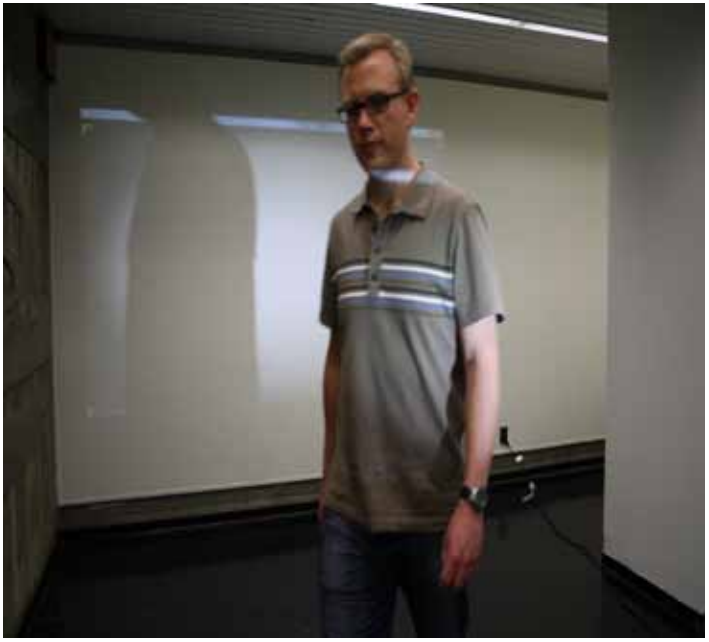
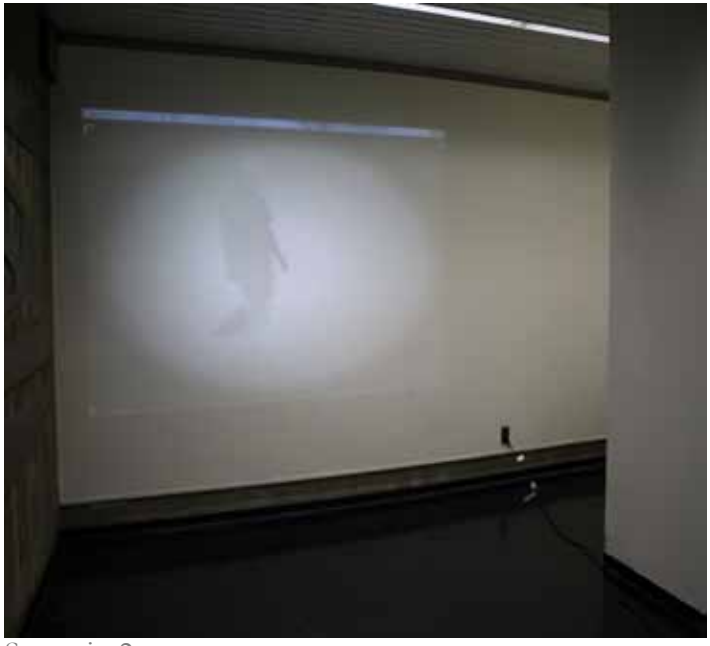


Scenario 1

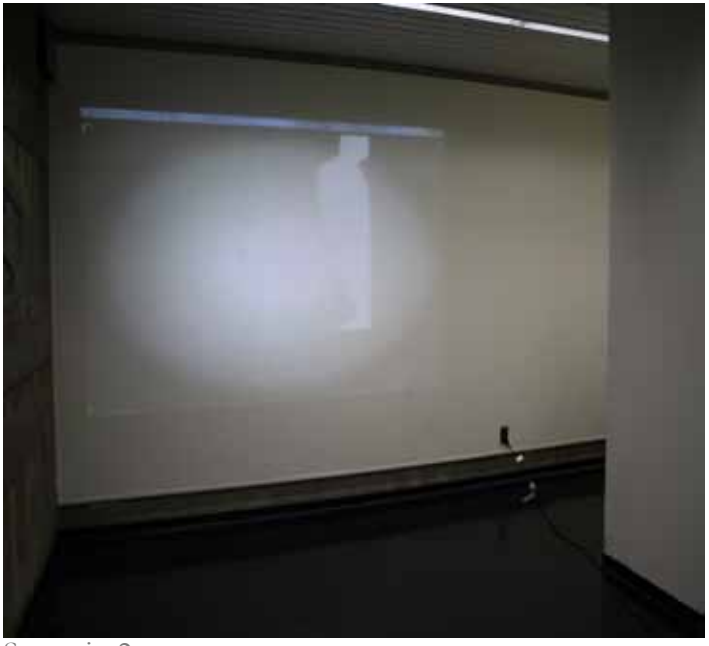
Scenario 1

Prototype Set Up

Scenario 2



Scenario 2



Scenario 2